



U.S. Patent Application No. 08/605,628  
Atty. Docket No.: S4264.000

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PATENT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Before The Board Of Patent Appeals And Interferences

BOARD OF PATENT APPEALS  
AND INTERFERENCES

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In Re Appeal of Application: )  
Charles B. SIMONE )  
Serial No.: 08/605,628 )  
Filed: February 22, 1996 )  
For: METHOD AND APPARATUS )  
FOR LIFESTYLE RISK )  
EVALUATION AND INSURABILITY )  
DETERMINATION )

APPELLANT'S SUPPLEMENTAL REPLY BRIEF

Assistant Commissioner for Patents  
Washington, D.C. 20231

This is a supplemental reply, in addition to the reply brief filed on June 18, 1998, to the Examiner's Answer filed April 24, 1998. It is believed that no fee is due at present. Any deficiency in the fees associated with this reply brief should be charged to deposit account no. 04-1073. This supplemental reply is believed to be necessary due to a

clarification of relevant legal principles by the United States Court of Appeals, Federal Circuit in State Street Bank & Trust Co. v. Signature Financial Group, Inc., 1998 WL 409704 (Fed. Cir. July 23, 1998), a copy of which is attached as Exhibit A.

Statements as to the real party in interest, related appeals and interferences, the status of the claims, the status of amendments, a summary of the invention, the issues of the Appeal, and the grouping of the claims may be found in Appellant's Appeal Brief, filed December 15, 1997.

I. NEW POINTS OF ARGUMENT

**1. The Examiner's Argument That A Lack Of Physical Data Processing Invalidates The Claimed Invention Under Section 101 Is Erroneous Under The State Street Case.**

The Examiner has rejected claims 1-8 under § 101 as being directed to an abstract idea and a mathematical algorithm which does not provide a practical application within the technological arts. The Examiner argues in her Answer that "no manipulation of data representing physical objects is found, as the data processed (i.e., the 'level of insurance risk') within the instant claim is mathematical, and not physical, *per se*. As no physical transformation is performed, no practical application is found." Examiner's Answer, p. 5.

This argument is erroneous in light of the recent State Street decision. In State Street, the Federal Circuit reversed a District Court's holding of invalidity because the claimed subject matter fell into the "mathematical algorithm" exception to § 101. The claims at issue in that case were six "machine" claims incorporating means-plus-function clauses. The sole independent claim recited a data processing system for managing a financial services configuration of a portfolio having computer processor means, storage means, a first means for initializing the storage medium, and second through fifth means which process various data and allocate the data to each of the funds in the portfolio. Essentially, the claims are directed to the transformation of data, through a series of mathematical calculations, into output data, i.e., a final share price.

In reversing, the Federal Circuit stated that as a practical matter, in order for an algorithm to be patentable, it must be applied in a useful way. The Federal Circuit then held "that the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation because it produces 'a useful, concrete and tangible result.'"

State Street, 1998 WL 409704 at p. 4 (quoting In re Alappat, 33 F.3d 1526, 1544 (Fed. Cir. 1994)).

By holding as it has in State Street, the Federal Circuit has made abundantly clear that a physical transformation of data is unnecessary for finding an algorithm patentable. What is necessary in order to find patentable a claim including an algorithm is that the algorithm be applied in a useful way.

The claims at issue here relate to a system and method for evaluating the health insurance liabilities of individuals based on their respective life styles. More specifically, this invention relates to a computer system for evaluating the cost to an employer or an insurance administrator for insurance coverage for individuals, where this cost will be a function of inputs reflecting lifestyle choices of the individual. The claimed computer system performs a detailed analysis of an individual's lifestyle factors by assessing the risks associated with such factors. The computer system then assigns a monetary insurance value to that individual based on a complete assessment of the lifestyle factors.

A valuable result of the above described system is that the invention provides a completely automated health insurance

evaluation system wherein a potential insured can interactively respond to a computer generated query. The questions cover a wide array of lifestyle choices including: use of various drugs, geographic information, exercise habits, nutrition patterns, social/sexual behavior, occupational data, exposure to radiation and chemicals, and stress. To assure the veracity of the answers, a separate set of medical questions is sent to the respondent's doctor or lab technologist.

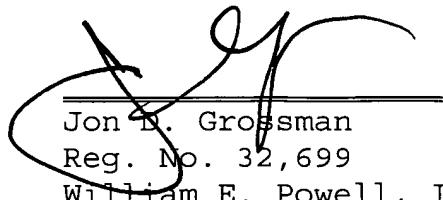
The computer system also attaches a positive or negative value to each response. Depending on the total points assigned a person, he or she would be placed in one of four health insurance plans.

In addition, the computer system correlates past values to present insurance premiums subsequent to the initial survey such as to reward an improvement in an individual's health. Thus, the system provides respondents with an incentive to modify their lifestyles. The system further recommends methods for such modification. For example, messages include information pertaining to correct vitamin doses, intake level of certain foods, suggestions on life style modifications, and recommendations for exercise.

Thus, the present invention recites a computer system that analyzes and weighs a vast array of information covering an individual's lifestyle, health, and medical records in order to derive an accurate insurance risk evaluation for that individual. (Claim 1, lines 1-25). Additionally, the invention by way of providing incentives, recommends ways to improve the individual's lifestyle such as to reduce risk factors.

Thus, Appellant maintains that its claimed invention is patentable, as made clear by the State Street decision, because the algorithm utilized therein is applied in a useful way.

Respectfully submitted,



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